

# PHOTOGRAPHIC INTERPRETATION REPORT



## MODIFIED ZSU-23/4 FIRE-CONTROL RADAR 7 NOVEMBER 1966 AND 1 MAY 1967 MOSKVA PARADES

NPIC/R-124/67  
JULY 1967

GROUP 1 EXCLUDED FROM  
AUTOMATIC DOWNGRADING  
AND DECLASSIFICATION

WARNING

This document contains information affecting the national defense of the United States, within the meaning of Title 18, sections 793 and 794, of the U.S. Code, as amended. Its transmission or revelation of its contents to or receipt by an unauthorized person is prohibited by law.

SECRET

25X1C

NPIC/R-124/67

25X1A  
25X1A

## MODIFIED ZSU-23/4 FIRE-CONTROL RADAR 7 NOVEMBER 1966 AND 1 MAY 1967 MOSKVA PARADES

25X1A

### INTRODUCTION

In response to the DIA requirement DIA-17-67 (ST), the following information has been compiled and is an update of the analysis of the ZSU-23/4 fire-control radar previously published. 1/

This update is comprised basically of information derived from [REDACTED] photographs of 7 November 1966 numbered [REDACTED] which is to date the best quality photography (Figure 1) available of the drive mechanism assembly on the original radar model, and [REDACTED] photography of 1 May 1967, which shows several modifications which have been effected in the radar drive assembly (Figure 2).

### ANALYSIS BASED ON 7 NOVEMBER 1966 PHOTOGRAPHY

Photograph [REDACTED] (Figure 1) shows the exterior face of the elevation drive mechanism is a stationary cover plate, rigidly secured by 13 fasteners, not including those along its bottom edge (Figure 3). These fasteners appear to secure this plate to a seat designed for this purpose. The seat ends at the outer ends of the radial cut on each side, then turns back under the circumferential edge, possibly forming a semi-circular seat. The bottom edge of the cover plate incorporates a cutout which turns up and around the optical boresight calibrator. This bottom edge does not appear to make contact

25X1A



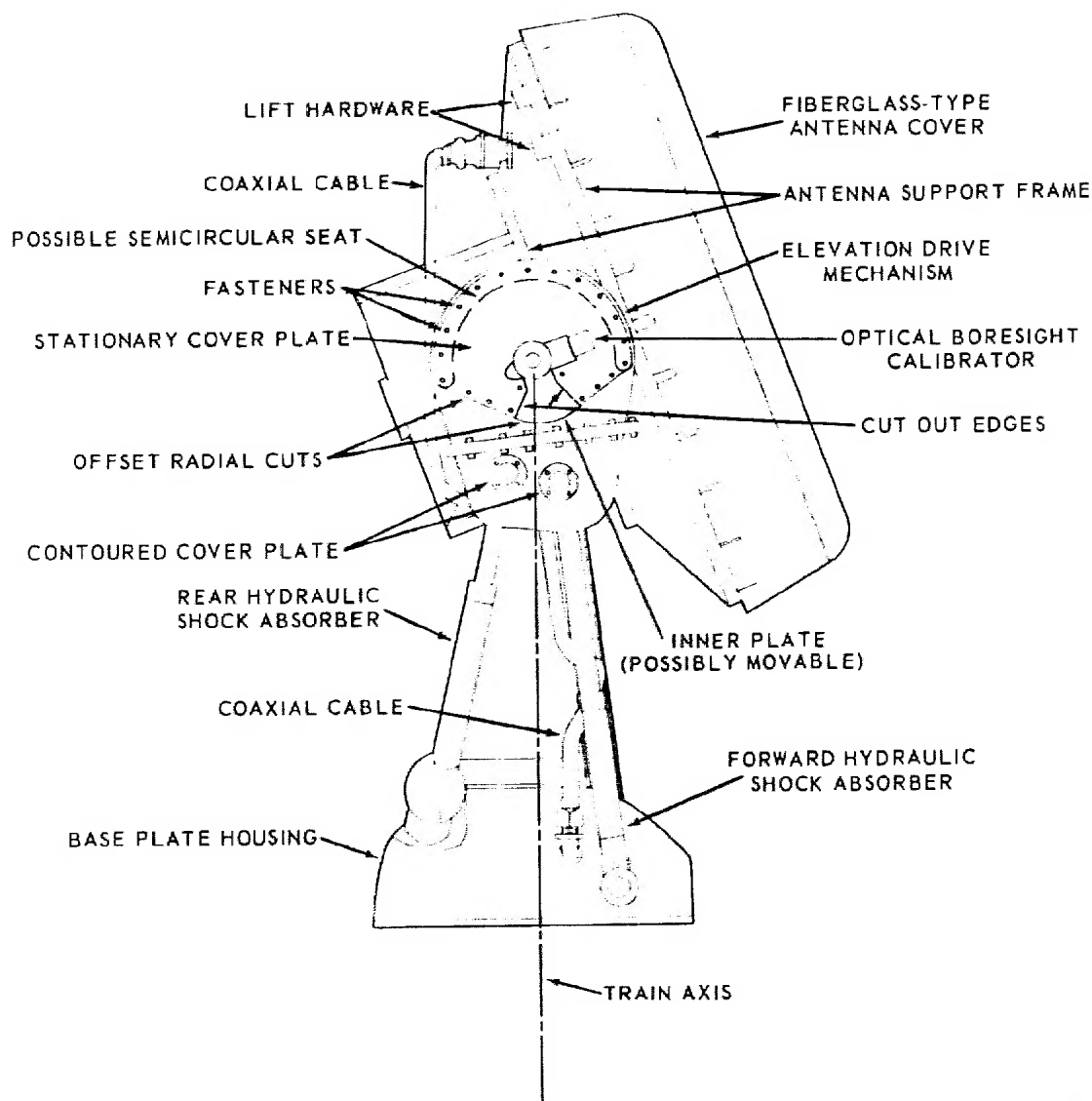
FIGURE 1. RIGHT SIDE OF THE FIRE-CONTROL RADAR, 7 NOVEMBER 1966.



FIGURE 2. THREE-QUARTER VIEW OF THE FIRE-CONTROL RADAR, 1 MAY 1967.

SECRET

25X1C



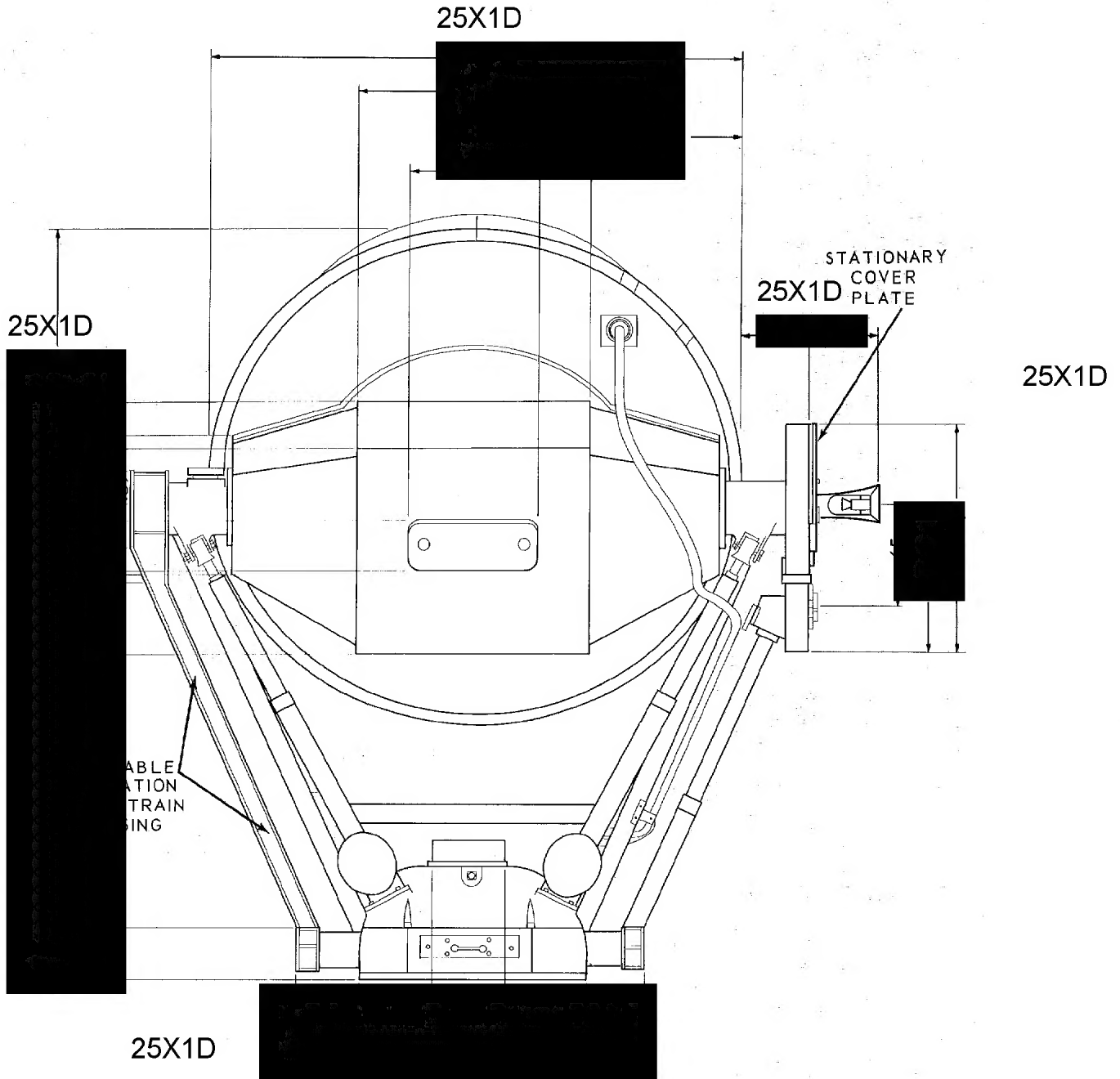
NPIC L-8804

FIGURE 3. RIGHT SIDE OF THE FIRE-CONTROL RADAR, BASED ON 7 NOVEMBER 1966 PHOTOGRAPHY.

SECRET

25X1C

NPIC/R-124/67



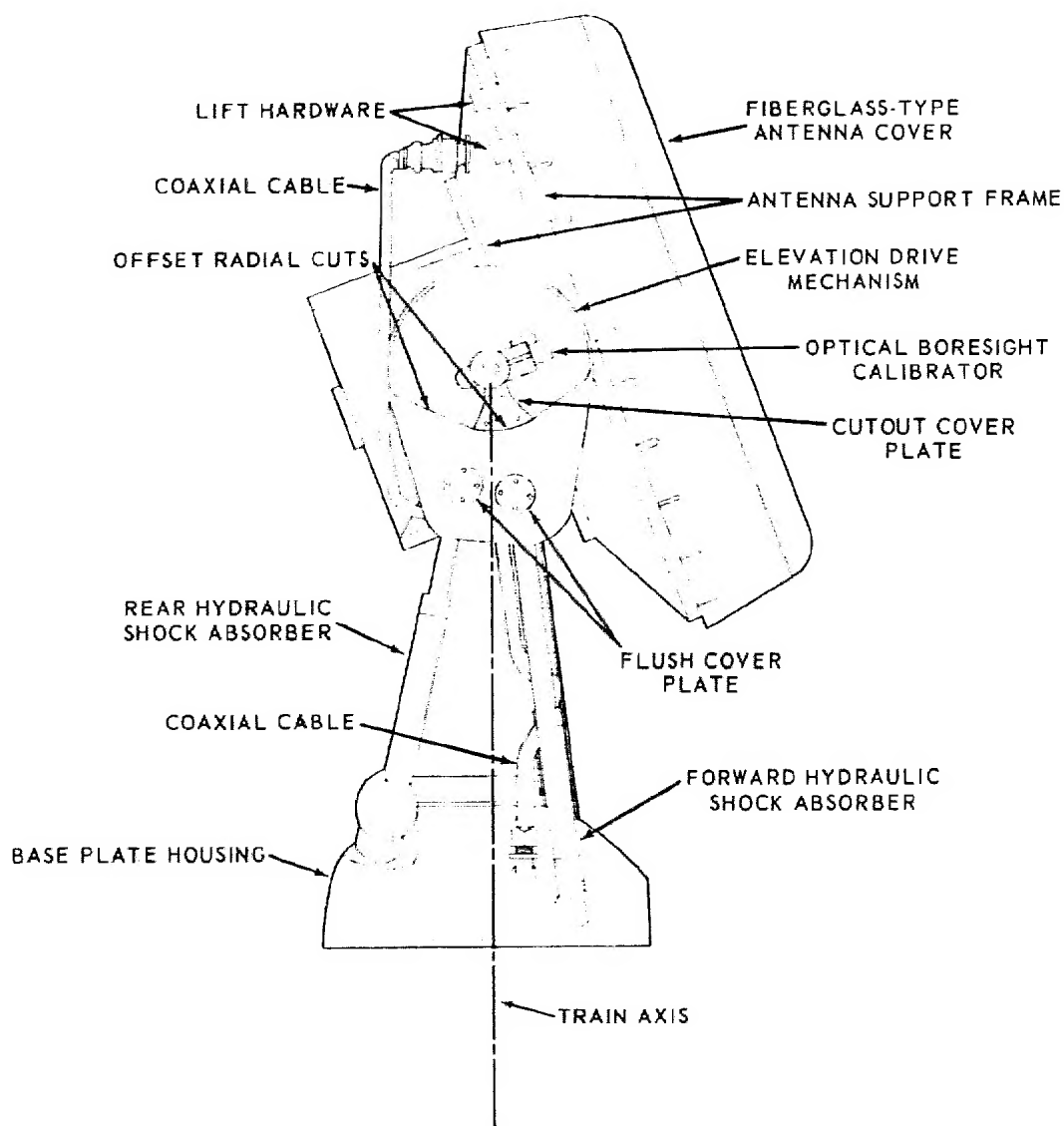
SCALE 1:12  
ALL DIMENSIONS IN FEET

FIGURE 4. DIMENSIONAL DRAWING OF THE BACK OF THE FIRE-CONTROL RADAR, BASED ON 7 NOVEMBER 1966 PHOTOGRAPHY.

SECRET

25X1C

NPIC/R-124/67



NPIC L-8806

FIGURE 5. RIGHT SIDE OF THE FIRE-CONTROL RADAR, BASED ON 1 MAY 1967 PHOTOGRAPHY.

SECRET

25X1C

25X1A

with the primary casting along the previously reported radial cuts. The 8 or more fasteners along this edge could secure a backing plate to the cover plate. This would then serve as a stiffener.

The cutout mentioned above reveals a possible rotating plate which may have radial cuts similar to the cover plate, or it may possibly be completely circular.

Some additional details of the optical bore-sight calibrator were observed and are depicted on Figure 4.

#### ANALYSIS BASED ON 1 MAY 1967 PHOTOGRAPHY



25X1A

shows certain modifications in the area of the drive mechanism assembly (Figure 2). Specifically, these modifications consist of the elimination of the previously reported stop plate, the addition of a plate covering the cutout described above, and the change from contoured cover plates (Figure 3) to flush-type plates (Figure 5) on the lower portion of the assembly. Of these modifications, the elimination of the stop plate is the most significant, as this would require a new casting for this entire assembly and would negate any externally visible need for the radial cut design of the upper portion of the assembly.

#### REFERENCES

##### PHOTOGRAPHY

25X1D

photography of 7 November 1966 and 1 May 1967 Moskva parades (CONFIDENTIAL)

##### DOCUMENT

1. NPIC. R-88/67, *Fire-Control Radar Mounted on ZSU-23/4 Self-Propelled Antiaircraft Gun*, 7 November 1965 and 1 May 1966, *Moskva Parades*, Mar 67 (SECRET/No Foreign Dissem)

25X1C

##### REQUIREMENT

DIA-17-67 (ST)

##### NPIC PROJECT

11460/67

Approved For Release 2000/04/17 : CIA-RDP78B04560A005800010039-3

RECORD COPY	COPY NO.	PUB. DATE	LOCATION	MASTER	DATE RECEIVED	LOCATION											
DISPOSITION DATE(S)				STOCK	MINIMUM	MAXIMUM											
CUT TO COPIES	25	DATE 1-70	CUT TO COPIES	DATE	COPIES DESTROYED												
CUT TO COPIES	10	DATE 1-72	CUT TO COPIES	DATE													
CUT TO COPIES	0	DATE 1-74	MASTER	DATE													
DATE			NUMBER OF COPIES			DATE			RECEIVED OR ISSUED			NUMBER OF COPIES					
MO.	DAY	YR.	RECEIVED OR ISSUED			REC'D	ISS'D	BAL	MO.	DAY	YR.	RECEIVED OR ISSUED			REC'D	ISS'D	BAL
8	2	67	Dist. Unit			52		52									
11	10	69	Dest. 27				27	25									
1	27	70	Dest. 15				15	10									
10	18	70	Dest 10 Copies					0	W	K	G						
Approved For Release 2000/04/17 : CIA-RDP78B04560A005800010039-3																	

S/NOFORN EXCEPT

TITLE

NPIC/R-124/67

July 1967

505108

X



Approved For Release 2000/04/17 : CIA-RDP78B04560A005800010039-3  
25X1C

Approved For Release 2000/04/17 : CIA-RDP78B04560A005800010039-3